Sub B1

1. A method of manufacturing a semiconductor device comprising the steps of:

preparing a plurality of semiconductor islands over a glass substrate;

subjecting said semiconductor islands to an ion doping;

directing a pulsed excimer laser beam having a cross section elongated in one direction to said glass substrate;

moving said glass substrate in a direction perpendicular to the elongation direction of said pulsed excimer laser beam, thereby irradiating said semiconductor islands with said pulsed excimer laser beam.

2. A method according to claim 1 wherein an energy density of said pulsed excimer laser beam is not higher than 300 mJ/cm^2.

3. A method according to claim 1 wherein an impurity selected from the group consisting of phosphorus and boron is selectively introduced into said plurality of semiconductor islands by said ion doping.

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4. A method according to claim 1 wherein each of said semiconductor islands is irradiated with plural pulses of said pulsed excimer laser beam.

5. A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film over a glass substrate;

crystallizing said semiconductor film;

patterning the crystallized semiconductor film into a plurality of semiconductor islands;

subjecting said semiconductor islands to an ion doping;

directing a pulsed excimer laser beam having a cross section elongated in one direction to said glass substrate;

moving said glass substrate in a direction perpendicular to the elongation direction of said pulsed excimer laser beam, thereby irradiating said semiconductor islands with said pulsed excimer laser beam.

6. A method according to claim 5 wherein an energy density of said pulsed excimer laser beam is not higher than 300 mJ/cm^2.

7. A method according to claim 5 wherein an impurity selected from the group consisting of phosphorus and boron is selectively introduced into said plurality of semiconductor islands by said ion doping.

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8. A method according to claim 5 wherein each of said semiconductor islands is irradiated with plural pulses of said pulsed excimer laser beam.

9. A method of manufacturing a semiconductor device comprising the steps of:

preparing a plurality of first semiconductor islands and a plurality of second semiconductor islands over a glass substrate;

subjecting both of said first and second semiconductor islands to a first ion doping for introducing a first impurity;

subjecting only said first semiconductor islands to a second ion doping for introducing a second impurity wherein said second impurity has an opposite conductivity type to said first impurity;

directing a pulsed excimer laser beam having a cross section elongated in one direction to said glass substrate;

moving said glass substrate in a direction perpendicular to the elongation direction of said pulsed excimer laser beam, thereby irradiating both of said first and second semiconductor islands with said pulsed excimer laser beam.

10. A method according to claim 9 wherein an energy density of said pulsed excimer laser beam is not higher than 300 mJ/cm^2.

11. A method according to claim 9 wherein said first impurity is phosphorus while said second impurity is boron.

12. A method according to claim 9 wherein each of said first and second semiconductor islands is irradiated with plural pulses of said pulsed excimer laser beam.

13. A method of manufacturing a semiconductor device comprising the steps of:

preparing a plurality of semiconductor islands over a glass substrate;

forming a film comprising silicon oxide over said glass substrate wherein said semiconductor islands are covered by said film;

subjecting said semiconductor islands to an ion doping through said film;

directing a pulsed excimer laser beam having a cross section elongated in one direction to said glass substrate;

moving said glass substrate in a direction perpendicular to the elongation direction of said pulsed excimer laser beam, thereby irradiating said semiconductor islands with said pulsed excimer laser beam through said film.

14. A method according to claim 13 wherein an energy density of said pulsed excimer laser beam is not higher than 300 mJ/cm^2.

15. A method according to claim 13 wherein an impurity selected from the group consisting of phosphorus and boron is selectively introduced into said plurality of semiconductor islands by said ion doping.

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16. A method according to claim 13 wherein each of said semiconductor islands is irradiated with plural pulses of said pulsed excimer laser beam.

17. A method of manufacturing a semiconductor device comprising the steps of:

preparing a plurality of semiconductor islands comprising silicon and germanium over a substrate;

subjecting said semiconductor islands to an ion doping;

directing a pulsed excimer laser beam having a cross section elongated in one direction to said glass substrate;

moving said glass substrate in a direction perpendicular to the elongation direction of said pulsed excimer laser beam, thereby irradiating said semiconductor islands with said pulsed excimer laser beam.

18. A method according to claim 17 wherein an impurity selected from the group consisting of phosphorus and boron is selectively introduced into said plurality of semiconductor islands by said ion doping.

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19. A method of manufacturing a semiconductor device comprising the steps of:

preparing a plurality of semiconductor islands comprising silicon and germanium over a substrate;

forming a film comprising silicon oxide over said glass substrate wherein said semiconductor islands are covered by said film;

subjecting said semiconductor islands to an ion doping through said film;

directing a pulsed excimer laser beam having a cross section elongated in one direction to said glass substrate;

moving said glass substrate in a direction perpendicular to the elongation direction of said pulsed excimer laser beam, thereby irradiating said semiconductor islands with said pulsed excimer laser beam through said film.

20. A method of manufacturing a semiconductor device according to claim 19 wherein each of said semiconductor islands is irradiated with plural pulses of said pulsed excimer laser beam.

Add B1